



SWARC NEWS

Notes from K7RLH

Welcome to 2023! I hope you all had a pleasant and safe holiday season. We had our first meeting of the new year on 4 January 2023 with about 20 folks in attendance counting the program presenter and some Zoom attendees. Look for the list and more about the program further down in this newsletter.

We ask you to keep the following in your thoughts and prayers:

Gary, KO4LQX, Kenny, KJ4CVK, Velda, K4VJC, Mike, KD4MC, and Steve, KA0GMY.

Steve, KA0GMY, will have his second vascular surgery next week, so remember him, Steve Jr., and Miss Gloria as well.

As I reported before, Gary Plante, KO4LQX, has had a recurrence of cancer in the larynx and doesn't yet know what treatment regimen will be specified, but he will be working with a speech therapist for voice improvement following the tracheotomy.

Velda, K4VJC, continues to make improvement; see Mike's posts on FB for more up to date info. Look for other news and info in the body of the newsletter.
SWARC de K7RLH

Notes from KO4ZFO

Thank you too all of those who were able to make our January monthly meeting, either in person or by our Zoom meeting. We had a wonderful presentation this month, so if you missed it, we will be posting the recording online momentarily.

Next month is our auction month, so if you have any equipment you are looking to get rid of, looking to pick up something you want, don't miss our February meeting. We also will do a Zoom meeting for this as well, in case you are unable to attend in person. More details to follow later this month.

Also, don't forget we are taking pre-orders for our club T-shirts. If you plan to order any, please email me sizes and quantities. I would like to have all pre-orders in by March 1st. Money for T-shirts will be collected when the shirts are delivered. I will be sending more information later this month with the final details, price and hopefully a picture of the final design. Estimated price per shirt \$12-15 for short sleeve. If anyone is interested in long sleeve, please make note of that in your request.

Thanks again all!

73

KO4ZFO

SWARC 4 January 2023 Meeting Recap

Since we currently have no club secretary, here is a recap of the meeting.

There was lots of really good chili and corn bread of several varieties enjoyed by the attendees listed below.

The meeting opened with the Pledge of Allegiance, followed by introductions around the room and on Zoom and Christy's treasurer report.

In-Person Attendees included:

Richard Hall (K7RLH), Bill Blomgren (KK4QDZ), Rodney Warren (KO4ZFO), Al Crawford (WA4TCJ), Steve Mowels (KA0GMY), Ken Castille (KN4GUS), guest Rich Gehle (N4DPQ), Brian Knox (KK4BK), Dave Krum (NW3U) and Penny, Dave (K4MSE), Greg Gabry (N9PGG), Steve (WB4SMS), Christy (KJ4AEO), Mike (KD4OKR), Robert Walker (no call yet), and guest Homer Ringer (W4RZD).

Zoom Attendees included:

Program presenter Thomas Witherspoon (K4SWL); Andy McDaniel (KN4JJU), and Curt Phillips (W4CP).

Old/Unfinished Business (This will remain until the committee has resolved the constitutional change and brought it up for vote to the membership.)

Our constitution requires at least 30% of ‘full’ membership to be present to enable business to be conducted. I believe that means that all business we have conducted in recent history is in violation of our constitution and that must be changed so that the club can function properly.

I have appointed Brian, KK4BK, and Bernie, N4BAJ, to assist me with the review of the constitution.

We only have one key to the radio room, which is kept in the lock box by the door. Members wishing to access the radio room should contact one of the officers for the key box combination.

New Business

None.

Food for Thought

Left over from last month: ordering name tags for new members and perhaps a new t-shirt with SWARC logo and no specific event, thus not dating the shirt. Al Crawford (WA4TCJ) has determined that name tags will cost about \$11.00 which

includes shipping cost. Please contact Al directly at wa4tcj@juno.com if you wish to obtain a name tag—be sure to give him your name and call sign.

Rodney (KO4ZFO) is the point person for the t-shirts but you should let him know of your interest so that we can perhaps get discounted printing for volume sales.

Presentation Topic

Guest speaker, Thomas Witherspoon (K4SWL)'s topic was listed as POTA, but he actually presented a very interesting and informative discussion of antenna types to be used for POTA (Parks on the Air) and SOTA (Summits on the Air). He discussed both resonant and non-resonant types and talked about uses successes with each type. We recorded the Zoom presentation and it will be on our web site very soon, if not already!

TREASURER'S REPORT

Christy Fernandini presented a report with \$1,443.64 balance after the disbursements approved last meeting: \$600.00 to Danny Hampton for repeater upkeep, award for Ham of Year, and NC QSO Party award sponsorship. There was no new income for the month of December.

MEMBERSHIP

You can bring a check or cash for dues to the next meeting or mail them to the club PO box and Christy will let me know she has received them. Also, you can now renew somewhat online by contacting Christy and giving her the appropriate credit card info for the 'Square' account. Christy's email is christyfernandini@outlook.com

Makes checks payable to South Wake ARC.

Send it to South Wake ARC – PO Box 1565 – Fuquay Varina, NC 27526

Steve, WB4SMS

NET REPORT

SWARC Group – December 2022

We have four individuals who can be referred to as net check in champs for November; they are Bill, KK4QDZ and Richard, K7RLH; Al, WA4TCJ, and Donald, KN4OEY were tied. The monthly total of check-ins was 255 and the YTD total was 3,283! Note that **not** all net controls record their counts so numbers could be higher than recorded.

- Saturday and Sunday evenings will be called by KT4JR & K7RLH
- KO4ZFO will call Monday evenings
- KA0GMY will call Tuesday evenings (backup is K7RLH)
- KK4BK will call Wednesday evenings except on meeting nights
- KJ4CVK will call Thursday evenings
- Fridays will continue to be called by NC4MP
- And we need backups – JUST BECAUSE.

Please contact Richard Hall, K7RLH, if you are interested in calling one or more nets.

Public Service

*Check the HPSNC.org web site often for Public Service opportunities.
The public service season is upon us and events need volunteers.
Note: the public season is now closed until the spring.*

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of its members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service.

BOARD OF DIRECTORS

President

Richard Hall--K7RLH

Vice President

Rodney Warren—KO4ZFO

Secretary

Vacant

Treasurer

Christy Fernandini - KJ4AEO

Member-At-Large

Al Crawford – WA4TCJ

Member-At-Large

Bernie Jones – N4BAJ

Member-At-Large

Mike Gaither –

K4MWG

Member-At-Large

Brian Knox--KK4BK

Membership Chair

Steve Suzanne—

WB4SMS

Appointed Positions

NET MANAGER

Kenny Souther-KJ4CVK

Special Events Director

Gino Fernandini –KI4YXO

Public Service Director

David Krum – NW3U

LINKS (if you have other links you want added then send them to me)

PRN

A Wide Area Digital Amateur Radio Network

www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

Ham Radio Outlet HRO

www.qrz.com

Raleigh Amateur Radio Society RARS

www.hamradio.com

Johnson Amateur Radio Society JARS

www.rars.org

South Wake Amateur Radio Club SWARC

www.jars..net

Carolina 440 Network

www.southwakearc.com

North Carolina Packet

www.carolina440.net

TARPN (Terrestrial Amateur Packet Radio Net)

www.ncpacket.com

Useful Ham Info

www.tarpn.net

Car Radio Development History

www.torborg.com/a

<https://www.titlemax.com/articles/the-history-of-the>

ARRL News

ARRL Volunteers On the Air Event is Underway

ARRL's yearlong operating event, [Volunteers On the Air](#), or VOTA, began January 1, 2023. The event is organized as part of ARRL's 2023 theme, "Year of the Volunteers," which recognizes the contributions of ARRL member volunteers, and offers opportunities to become more active and involved in amateur radio and ARRL.

VOTA encourages participants to make contacts with ARRL members and volunteers, earning points for each contact. Point values have been assigned (see



the Points Table at vota.arrl.org). All scoring is automatically calculated through ARRL's Logbook of The World (LoTW, www.arrl.org/logbook-of-the-world). If you are already an LoTW user, continue to upload your QSOs there to participate. If you're a new LoTW user, visit [Getting Started with LoTW](#).

As part of the event, there will be week-long activations by W1AW portable stations operating in all US states and territories. W1AW/# portable operations are worth 5 points for each contact, and they can be contacted on all bands and modes. There's also an opportunity to earn the W1AW Worked All States Award. There will be two week-long W1AW operations from each of the 50 states.

Later in the event, an on-line scoreboard, the VOTA Leaderboard, will be activated, allowing each participant to see how their score measures up with other participants throughout the year.

Only two-way contacts qualify for points (cross-band, cross-mode, and repeater contacts are not valid), using any mode (CW, phone, or digital) - including EME and satellite operations - on 160, 80, 40, 20, 15, 10, 6, 2, and 1.25 meters, as well as 70 centimeters, VHF/UHF/SHF, and microwave bands available to US amateurs above 2 meters (2190-, 630-, 60-, 30-, 17-, and 12-meter band contacts are not counted for credit in this event).

Join the fun! Visit the official VOTA website for further details: vota.arrl.org.

More Amateur Radio Astronauts Head for the International Space Station

Three of the four new astronauts on February's planned launch of the SpaceX Crew-6 mission to the International Space Station (ISS) are amateur radio operators.

Pilot Warren "Woody" Hoburg, KB3HTZ; Commander Stephen Bowen, KI5BKB, and Mission Specialist Sultan Al Neyadi, KI5VTV, will join Mission Specialist Andrey Fedyayev on board the SpaceX Dragon spacecraft, Endeavour.

The spacecraft will be atop a Falcon 9 rocket and, while a launch date has not been selected, the earliest date would be mid-February 2023.

All crew members have learned about [Amateur Radio on the International Space Station](#)(ARISS), received guidance on studying and testing, and learned how to operate the ARISS radios and the basics of on-the-air protocol from ARISS team members at NASA's Johnson Space Center.

The crew will be able to participate in ARISS, using the ham radio station on the ISS to contact schools and other educational institutions.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA, the ISS National Lab, [ARRL](#) The National Association for Amateur Radio®, and AMSAT.



The four crew members that comprise the SpaceX Crew-6 mission pose for a photo during a training session on the crew access arm at the Kennedy Space Center's Launch Pad 39A in Florida. From left are, Mission Specialist Andrey Fedyayev, Pilot Warren "Woody" Hoburg, Mission Specialist Sultan Al Neyadi, and Commander Stephen Bowen. Photo Courtesy of SpaceX.

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pulleys, rope



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The K7RA Solar Update

Tad Cook, K7RA, of Seattle, Washington, reports ARRL Propagation Bulletin ARLP001 for January 5, 2023:

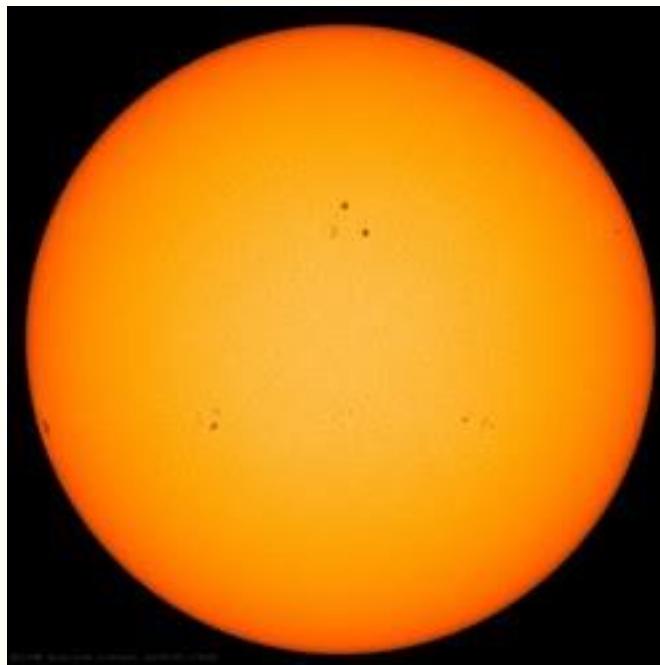
Two new sunspot groups emerged on December 29, 2022, one more on December 30, 2022, and another on January 1, 2023.

Solar activity was a little higher, with average daily sunspot numbers rising from 96.1 to 97, and solar flux averages rose 14 points to 157.8.

Predicted solar flux is 152 and 154 on January 5 - 6; 152 on January 7 - 8; 150, 148, and 146 on January 9 - 11; 150 on January 12 - 13; 145 on January 14; 140 on January 15 - 16; 145 on January 17 - 19; 150 and 155 on January 20 - 21; 160 on January 22 - 23; 165 on January 24 - 26; then 160, 155, 155, 158, and 155 on January 27 - 31.

Predicted planetary A index is 18, 12 and 10 on January 5 - 7; 5 on January 8 - 16; 8, 12, 25, 20, and 10 on January 17 - 21; 5 on January 22 - 24; 8, 28, 15, and 10 on January 25 - 28; 5 on January 29 - 30, and 18 on January 31 - February 1.

Article on Siberian Radioheliograph:
<https://bit.ly/3vGFJVm>



Solar disk image taken January 5, 2023, courtesy of NASA SDO/HMI.



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were 113, 121, 82, 94, 94, 89, and 86, with a mean of 97. The 10.7-centimeter flux was 162.8, 178.3, 164.9, 152.6, 146.4, 148.5, and 151, with a mean of 157.8. Estimated planetary A indices were 11, 31, 16, 14, 8, 7, and 21, with a mean of 15.4. Middle latitude A index was 8, 22, 10, 9, 5, 5, and 17, with a mean of 10.9.

Send your tips, questions, or comments to k7ra@arrl.net.

A comprehensive K7RA Solar Update is posted on Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean..." and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA.

A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

[Share](#) your reports and observations.

A weekly, full report is posted on [ARRL News](#).

Just Ahead in Radiosport

- January 5 - 6 -- Walk for the Bacon QRP Contest (CW)
- January 6 -- QRP Fox Hunt (CW)
- January 6 -- K1USN Slow Speed Test (CW)
- January 7 -- PODXS 070 Club PSKFest (digital)
- January 7 - 8 -- WW PMC Contest (CW, phone)
- January 7 - 8 -- SKCC Weekend Sprintathon (CW)
- January 7 -- RSGB AFS Contest (CW)
- January 7 - 8 -- Original QRP Contest (CW, phone)
- January 7 -- ARRL Kids Day (phone)
- January 7 - 8 -- ARRL RTTY Roundup (digital)
- January 7 - 8 -- EUCW 160-Meter Contest (CW)
- January 8 -- NRAU-Baltic Contest, SSB (phone)
- January 8 -- DARC 10-Meter Contest (CW, phone)
- January 8 -- NRAU-Baltic Contest (CW)
- January 9 -- 4 States QRP Group Second Sunday Sprint (CW, phone)
- January 11 - 17 -- VHF-UHF FT8 Activity Contest (FT8)

Visit the [ARRL Contest Calendar](#) for more events and information.

The advertisement for PreppComm Amateur Radio features a digital control panel with a blue screen displaying "PreppComm Morse Code Multi Band Transceiver" and "Morse Code Multi Band Transceiver". Below the panel is a red button. The background shows a satellite in space against a dark blue gradient. The text "PreppComm Amateur Radio" is at the top, followed by "Morse Made Easy™". At the bottom is the website "www.preppcomm.com".

The advertisement for RIGOL HDO1000 High Definition Oscilloscopes features a large yellow "RIGOL" logo at the top. Below it is the text "HDO1000 High Definition Oscilloscopes" and "WITH UltraVision III". It highlights "12 Bit Resolution with Low Noise for Signal Fidelity & Analysis". A price of "Starting @ \$699" is shown. On the right, there's a photograph of an oscilloscope with its screen displaying waveforms. The background has a yellow and black abstract design.

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Upcoming Section, State, and Division Conventions

- January 7 | [Ham Radio University](#), hosting the ARRL New York City-Long Island Section Convention, an online event
- January 20 - 21 | [Southwest Florida Regional Hamfest](#), hosting the ARRL Southern Florida Section Convention, Fort Myers, Florida
- January 20 - 21 | [Cowtown Hamfest](#), hosting the ARRL North Texas Section Convention, Forest Hill, Texas
- January 27 - 28 | [Capital City Hamfest 2023](#), hosting the ARRL Mississippi State Convention, Jackson, Mississippi
- January 28 | [Winterfest](#), hosting the ARRL Midwest Division Convention, Collinsville, Illinois
- February 10 - 12 | [Orlando HamCation](#), hosting the ARRL Southeastern Division Convention, Orlando, Florida
- February 17 - 18 | [LCARC Winter-Fest](#), ARRL Arkansas State Convention, Hoxie, Arkansas
- February 25 | [HAM-CON](#), hosting the ARRL Vermont State Convention, Colchester, Vermont
- March 3 - 4 | [BirmingHamfest](#), hosting the ARRL Alabama Section Convention, Trussville, Alabama
- March 3 - 4 | [Greater Houston HamFest](#), hosting the ARRL Texas State Convention, Rosenberg, Texas

Search the [ARRL Hamfest and Convention Database](#) to find events in your area.

Have News for ARRL?

Submissions for the ARRL Letter and ARRL News can be sent to news@arrl.org. -- John E. Ross, *KD8IDJ*, ARRL News *Editor*

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- Listen to [ARRL Audio News](#), available every Friday.
- *The ARRL Letter* is available in an accessible format, posted weekly to the [Blind-hams Groups.io](#) email group. The group is dedicated to discussions about amateur radio as it concerns blind hams, plus related topics including ham radio use of adaptive technology.



Subscribe to...

- [NCJ -- National Contest Journal](#). Published bimonthly, features articles by top contesters, letters, hints, statistics, scores, NA Sprint, and QSO parties.
- [QEX -- A Forum for Communications Experimenters](#). Published bimonthly, features technical articles, construction projects, columns, and other items of interest to radio amateurs and communications professionals.

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